

STUDYING SPECIALIZED ABBREVIATIONS WITH A MULTILINGUAL LEXICOGRAPHIC WEB APPLICATION

Savinkova A. K., student, Kontsevov M. P., Senior Lecturer

*Brest State University named after A. S. Pushkin,
Brest, Republic of Belarus*

Abstract. *The article focuses on the importance of studying abbreviations for workers and students in mechanical engineering and technical universities, where the accuracy and speed of information transmission are critical. The development of a specialized multilingual dictionary of abbreviations in English, German, and Russian is presented, including explanations, interpretations, and contexts of use. For convenience, an interactive web application has been created, allowing users to search, add, and edit entries. The dictionary and application contribute to mastering professional terminology, improving communication, and preparing for real-world working conditions.*

Keywords: abbreviations in mechanical engineering, professional communication, efficiency of information transmission, intercultural competence.

In the modern world, where the speed and accuracy of information transmission play a crucial role, abbreviations have become an integral part of professional communication. This is especially relevant in fields such as mechanical engineering and technical sciences, where complex processes and technologies require clear and rapid data exchange. Moreover, in the context of digitalization and automation in production, the use of abbreviations has become not just convenient but essential for effective process management. This article examines the importance of studying abbreviations for workers and students in mechanical engineering and technical universities, as well as presents the development of a specialized dictionary of abbreviations, which can serve as a powerful tool for training and practical work.

Abbreviations, as shortened forms of words or phrases, are used to simplify communication and enhance the efficiency of information exchange. In the context of mechanical engineering and technical sciences, they play a particularly important role, as they allow for the quick and precise transmission of technical data, instructions, and commands.

The relevance of studying abbreviations in mechanical engineering and technical universities is determined by the following factors:

Efficiency of Communication. In complex production processes and projects, the speed of information transmission is critical. Abbreviations help reduce the time needed to convey technical data and instructions.

International Collaboration. Modern projects in mechanical engineering and technical sciences often involve international teams. Knowledge of commonly used abbreviations in different languages (English, German, Russian) helps avoid misunderstandings and improves coordination [1].

Professional Training. Studying abbreviations helps students and workers better understand specialized literature, technical documentation, and standards, thereby enhancing their professional competence. Furthermore, it contributes to the development of skills in working with international standards, such as ISO and DIN.

To effectively study and use abbreviations in professional activities, a specialized dictionary has been developed. It includes the most important terms in three languages: English, German, and Russian. The dictionary is structured to allow users to quickly find the necessary terms, understand their meanings, and learn the context of their use [2].

Each entry in the dictionary contains: the acronym/abbreviation, the full form of the term, translation and interpretation, context of use.

Examples:

HMI / MMI / ЧМИ

English: Human-Machine Interface.

German: Mensch-Maschine-Schnittstelle.

Russian: Человеко-машинный интерфейс.

Context: Interfaces for operator interaction with equipment.

ISO / ISO / ИСО

English: International Organization for Standardization.
German: Internationale Organisation für Normung.
Russian: Международная организация по стандартизации.
Context: Development of international standards for various industries.
R&D / F&E / НИОКР

English: Research and Development.
German: Forschung und Entwicklung.
Russian: Научно-исследовательские и опытно-конструкторские работы.
Context: Activities aimed at creating new technologies and products.

For ease of use, an interactive web application has been developed. It allows users to: search for abbreviations by keywords, add new entries through a user-friendly form, delete outdated or incorrect entries, save data in local storage (localStorage) to prevent loss upon page reload.

The application features a vibrant and intuitive interface, making it convenient for both students and professionals. Thanks to its adaptive design, the application is displayed correctly on various devices, including computers, tablets, and smartphones.

The dictionary and application have significant potential for training future mechanical engineers and technical specialists. They contribute to:

Mastering Professional Terminology. Students not only memorize abbreviations but also understand their meanings and contexts of use.

Developing Intercultural Competence. Comparing terms in different languages helps students better understand the nuances of professional communication in international teams.

Interactive Learning. The ability to add and edit entries makes the learning process more active and engaging.

Preparation for Real-Life Situations. Understanding the context of abbreviation use helps students adapt more quickly to working conditions. For example, knowledge of abbreviations such as PLC (Programmable Logic Controller) or CNC (Computer Numerical Control) allows specialists to navigate technical documentation and instructions more quickly.

The study of abbreviations is an important aspect of professional training for workers and students in mechanical engineering and technical universities. The developed dictionary and interactive web application provide a powerful tool for mastering specialized terminology, improving communication, and enhancing professional competence. In situations where the accuracy and speed of information transmission can determine the success of a project, such resources become indispensable aids for both future and current specialists.

References

1. Гришина, Е. В. Аббревиация как способ обогащения английского языка профессиональной коммуникации в области техносферной и пожарной безопасности / Е. В. Гришина, И. Н., Романова, Ю. В. Ферапонтова // Успехи гуманитарных наук. – 2021. – № 6. – С. 183–188.
2. Беляева, В. А. Когнитивный подход к изучению аббревиации // Фундаментальные исследования. – 2007. – № 9. – Педагогические науки. – С. 95–97.

УДК 81-115

ИНТЕРНАЦИОНАЛЬНАЯ ТРАНСПОРТНО-ЛОГИСТИЧЕСКАЯ ТЕРМИНОЛОГИЯ В АНГЛИЙСКОМ И НЕМЕЦКИХ ЯЗЫКАХ (ОСОБЕННОСТИ РАЗВИТИЯ И ФУНКЦИОНИРОВАНИЯ)

Балашова А. Ю., к.ф.н., доц.

*Российский университет транспорта РУТ (МИИТ),
г. Москва, Российская Федерация*

Реферат. В статье рассмотрена интернациональная лексика транспортно-логистической отрасли на материале русской, английской и немецкой терминологии, как один из показателей развития межкультурной коммуникации и международного сотрудничества.

Ключевые слова: интернационализм, термин, транспортно-логистическая отрасль,